**Understanding Low Voltage Systems –
Seminar Timed Outline**

Course Description

This course focuses on the two most important technical low voltage systems to the electrical contractor. The student will know the requirements for design and installation of low voltage systems and improve knowledge of code to ensure compliance.

CCTV Systems. CCTV systems provide observation and documentation. In this training, attendees will learn the technical details and design considerations for CCTV systems, as well as code requirements for wiring. Attendees will be capable of:
1. Identify design requirements for CCTV systems
2. Understand and apply features of analog and IP based systems
3. Know code compliance issues for burglar alarm systems

Burglar Alarm Systems. Burglar Alarm Systems provide property and personal protection. In this training, attendees will learn the technical details and design considerations for burglar alarm systems, as well as code requirements for wiring. Attendee will be capable of:
1. Identify design requirements for burglar alarm system
2. Properly apply system feature for maximum false alarm reduction
3. Know code compliance issue for burglar alarm systems

Fire Alarm Systems. Fire alarm systems are a critical aspect to overall life safety. In this training, attendees will learn the technical details of fire alarm system design, installation and code compliance which are essential to proper operation of the system. Attendees of this training class will be capable of:
1. Identify design requirements for fire alarm systems
2. Identify requirements for conventional and addressable fire alarm systems
3. Know code compliance issues for fire alarm systems

Structured Cabling. Structured cabling systems provide infrastructure to support modern, network based equipment and systems in commercial and residential applications. In this training attendees will learn the technical details and design considerations structured cabling systems, as well as code requirements for wiring. Attendees of this training class will be capable of:
1. Identify design requirements for commercial and residential structured cabling systems
2. Identify requirements for cabling and infrastructure hardware
3. Know code compliance issues for structured cabling systems

Course Outline

8am – 12am
CCTV System Design
- Analog vs conventional
- Lens and camera selection
- "How Much Record Time Will I Get?"
- Code compliance

Burglar Alarm System Design
- Interior and perimeter detection
- Control unit features
- False alarm reduction
- Code compliance

12pm – 1pm LUNCH

1pm – 5pm
Fire Alarm System Design
- Conventional vs addressable
- Initiating devices
- Notification appliances & communications
- Code compliance

Structured Cabling
- Commercial vs residential structured cabling
- Cable types and applications
- Infrastructure hardware
- Code compliance